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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 20 MAR 2001

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14

Applicant's or agent's file reference P 99-715 IJW/uh	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE00/00186	International filing date (day/month/year) 31.01.2000	Priority date (day/month/year) 01.02.1999
International Patent Classification (IPC) or national classification and IPC <sub>7</sub> B27N 3/18, B27N 3/08, B27N 3/24		
Applicant Valmet Fibertech AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  17.08.2000	Date of completion of this report  22.01.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer  Ulrika Nilsson/MP Telephone No. 08-782 25 00

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/SE00/00186

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement) under article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheet/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	<u>1-8</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-8</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-8</u>	YES
	Claims		NO

### 2. Citations and explanations (Rule 70.7)

The claimed invention presents a method and an arrangement for the continuous manufacturing of profiled lignocellulose-containing board or strip-like products.

The aim of the claimed invention is to provide a continuous process up to the finished product with as little material loss as possible. For this purpose, the method and arrangement possess the features defined in the characterising parts of claims 1 and 7 respectively.

The following documents are cited in the International Search Report:

D1: US 5 179 986 A

D2: SE 502 272 C2

D1 discloses a method for improving the mouldability of a board mat. Firstly, a first series of internally directed discontinuous incisions are made in the upper and lower surfaces of the fibreboard mat. Following is a step where a second series of internally directed discontinuous incisions are made in the previously first made incisions; the second series incisions are angled with respect to the incisions of the first series.

D2 relates to a method of manufacturing lignocellulosic fibreboards. The method comprises the steps of steam heating a mat and compressing it to form a partially hardened board, which is further compressed to a higher density.

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V.

The documents are considered to only represent prior art and do not disclose the special combination of features defined in the invention.

According to the invention the fibre mat prior to being pressed, is given a surface profile that is maintained during the steam injection process, whereupon the surface of the board of strip-like product is compressed.

It is not considered obvious to a person skilled in the art to apply these features to D1 or D2 and thus arrive at the invention as revealed in claims 1-8. Therefore, the subject matter of these claims fulfils the requirements of novelty, inventive step and industrial applicability.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE 00/00186

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B27N 3/18, B27N 3/08, B27N 3/24  
According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B27N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5179986 A (LAUREN J. BEUVING ET AL), 19 January 1993 (19.01.93), column 1, line 12 - line 22, abstract  --	1-8
A	SE 502272 C2 (SUNDS DEFIBRATOR INDUSTRIES AB), 25 Sept 1995 (25.09.95), page 4, line 28 - line 38, abstract  -----  As	1-8

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

\* Special categories of cited documents:  
"A" document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier document but published on or after the international filing date  
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search

3 May 2000

Date of mailing of the international search report

17 -05- 2000

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. +46 8 666 02 86

Authorized officer

Ulrika Nilsson/MP  
Telephone N. +46 8 782 25 00

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

02/12/99

International application No.  
PCT/SE 00/00186

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
US	5179986	A	19/01/93	US	5129435	A	14/07/92
SE	502272	C2	25/09/95	AT	182831	T	15/08/99
				AU	674473	B	19/12/96
				AU	688758	B	19/03/98
				AU	1673395	A	15/08/95
				AU	6390494	A	11/10/94
				CA	2179503	A	03/08/95
				CN	1137769	A	11/12/96
				CZ	282782	B	15/10/97
				CZ	284373	B	11/11/98
				CZ	9502491	A	13/03/96
				CZ	9601972	A	16/10/96
				DE	69415000	D,T	22/04/99
				DE	69511242	D	00/00/00
				EP	0690895	A,B	10/01/96
				EP	0741635	A,B	13/11/96
				ES	2134438	T	01/10/99
				FI	962977	A	26/07/96
				HU	77664	A	28/07/98
				HU	9601933	D	00/00/00
				JP	8508060	T	27/08/96
				JP	9508328	T	26/08/97
				NZ	279569	A	24/11/97
				PL	176748	B	30/07/99
				PL	310802	A	08/01/96
				PL	315629	A	25/11/96
				SE	9400266	A	29/07/95
				SI	9520019	A	28/02/97
				SK	89396	A	04/12/96
				SK	119095	A	04/06/97
				SK	279254	B	05/08/98
				US	5749992	A	12/05/98
				WO	9520473	A	03/08/95

## PATENT COOPERATION TREATY

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## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 04 October 2000 (04.10.00)	
International application No. PCT/SE00/00186	Applicant's or agent's file reference P 99-715 IJW
International filing date (day/month/year) 31 January 2000 (31.01.00)	Priority date (day/month/year) 01 February 1999 (01.02.99)
Applicant ERIKSSON, N., Lennart et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

17 August 2000 (17.08.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Claudio Borton
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38